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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,326	12/09/2002	Jori Arrakoski	NOKIA.4013US	1361

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EXAMINER

SCHEIBEL, ROBERT C

ART UNIT	PAPER NUMBER
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2619

MAIL DATE	DELIVERY MODE
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10/22/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/089,326

Applicant(s)

ARRAKOSKI ET AL.

Examiner

Robert C. Scheibel

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 36-88 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 36-88 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- Examiner acknowledges receipt of Applicant's Amendment filed 8/17/2007.
- Claims 36, 40, 41, 45, 52-54, 58, 59, 63, 70, 74, 75, 79, and 86-88 are currently amended.
- Claims 36-88 are currently pending.

Response to Arguments

1. Applicant's arguments, see "Anticipation Rejection" on pages 12-13, filed 8/17/2007, with respect to the rejection of claims 36, 37, 52-55, 70, 71, and 86-88 under 35 U.S.C. 102(b) have been fully considered but they are not persuasive.

In the first paragraph of this section, Applicant portions of the rejections and asserts that the rejection is traversed. The next paragraph summarizes the changes that have been made to the claims with this amendment. The last sentence of the paragraph also discusses limitations ("not merely signaling and connection setup...") which are not present in the claim language. The third paragraph also discusses features of the invention which may be in the specification, but are not present in the claim language. The fourth paragraph summarizes portions of the Samadi reference. In the fifth paragraph of this section, Applicant alleges that Samadi does not disclose the third limitation of claim 36 and the analogous limitation of the other independent claims. The arguments discuss a handover process which is not present in the claim language. The arguments also assert that in the Samadi reference, "only the connection set-up/context" is routed through the switches and "not the actual communication path". Examiner respectfully disagrees. As indicated clearly in lines 23-25 of column 5, the solid lines in the figures represent the actual communication path, while the dashed lines represent signaling links. Figure 2B

Art Unit: 2619

clearly shows solid lines (261, 262, 233) connecting a first network subscriber unit (subscribers connected to switch 204 such as 225 and 228) via the first sink node (switch 204) to a second network unit (phone 221'/laptop 228'). These are clearly the "actual communication path" and anticipate the broad claim language.

While there may be differences between the present invention as described in the specification and the Samadi reference, the claim language is extremely broad and is thus anticipated by Samadi. Examiner strongly recommends that Applicant amend the claim language to clearly specify the main novelty of the invention and distinguish the claims from Samadi.

2. Applicant's arguments, see "Obviousness Rejection" on pages 13-14, filed 5/17/2007, with respect to the rejection of claims 38-51, 56-69, and 72-85 have been fully considered but they are not persuasive.

In the first paragraph of this section, Applicant portions of the rejections and asserts that the rejection is traversed. The next paragraph summarizes portions of the Mueller reference. The third paragraph of this section asserts that Mueller does not disclose the limitation in the independent claims discussed above with respect to Samadi. While this may or may not be the case, Examiner maintains that Samadi discloses this limitation as indicated above. In the fourth paragraph of this section, Applicant that there is no motivation to combine the references as suggested in the 103 rejection. However, Mueller discloses the missing limitations of the claims and also explicitly provides motivation for using the teaching of these limitations (lines 59-63 of column 3); thus, one of ordinary skill in the art would be sufficiently motivated to modify Samadi as suggested by Mueller.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims **36, 37, 52-55, 70, and 86-88** are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,664,007 to Samadi et al.

Regarding claims **36, 52-54, 70, and 86-88**, Samadi teaches a communications system and method comprising (Fig. 2B):

a first network (Network A 201) comprising a plurality of first network subscriber units or communication terminals (Fig. 2B phone 221 and laptop computer 228) and a first network sink node unit (Switch 204) configured to wirelessly communicate with the first network subscriber units (Col. 4, Lines 45-55);

a second network (Network B 202) geographically at least partly overlapping the first network (Col. 2, Lines 51-56), comprising a plurality of second network subscriber units (Col. 3, Lines 2-5) a second network sink node unit (Switch 205) configured to wirelessly communicate with the second network subscriber units (such switch 203 and 205 is able to talk to cellular phone 221 wirelessly, See Fig 2A and Fig. 2B), and

a dedicated connection between the first network sink node unit and a second network unit configured to communicate in the second network, whereby one of the first network subscriber units is provided with a communication path via the first network sink node unit to

Art Unit: 2619

said second network unit (Fig. 2B , dash-line 251, 256 and solid line 261, 262, 233 between two switches and communication units 221 and 225 in the two network, Col. 5, Lines 22-25).

Additionally, the limitation of claims 54, 70, and 86-88 that the first sink node configured to operate as a second communication terminal for providing the first communications terminals with communications access to the second network is clearly disclosed in figure 2B, for example. The first sink node (switch 204) certainly provides the functionality of a second communication terminal recited in the claims; that is it clearly provides the first communication terminals (such as unit 225) with access to the second network (via connection 261, for example).

Regarding claims **37, 55, and 71**, Samadi discloses the limitation that the wireless communication in the first network is independent of wireless communication in the second network in Col. 4, Lines 62-63, for example.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims **38-51, 56-69, and 72-85** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,664,007 to Samadi et al in view of U.S. Patent 6,185,413 to Mueller et al.

Regarding claims **38, 56, and 72**, Samadi discloses all the limitations of parent claims 37, 55 and 36 as discussed above. However, Samadi does not explicitly teach the first network is in a different frequency band from wireless communication in the second network.

Mueller teaches several different communication networks can have different frequency band (Fig. 3a, Col. Lines). In Fig. 2, GSM, DCS1800 and DECT use three different frequency bands.

It would have been obvious to a person of the ordinary skill in the art at the time the invention was made to combine a plurality of different frequency bands as Muller taught within a plurality of overlapping wireless communication networks taught by Samadi to obtain the invention as specified in claims 38, 56, and 72.

The motivation for doing so would have been to provide a selection of a large number of different mobile radio network systems and appropriate providers depending on the range of the individual mobile radio networks (Col. 3, Lines 59-63).

Regarding claims **39, 57, and 73**, Samadi modified by Muller, discloses the first network comprises a plurality of first network sink node units (Switches) with that the first network subscriber units or communication terminals are configured to wirelessly communicate (Col. 4, Lines 56-58).

Regarding claims **40, 58, and 74**, Samadi modified by Muller, discloses a plurality of a connections, each connection being between a respective first network sink node unit and a respective second network unit whereby one of the first network subscriber units or

Art Unit: 2619

communication terminals maybe provided with a communication path via the respective first network sink node to another second network unit in the plurality of connections with switch 410 in figures 4A and 4B.

Regarding claims **41, 59, and 75**, Samadi modified by Muller, discloses the communications system comprising:

a third network geographically overlapping the second network (see figures 4A and 4B of Samadi, for example as well as lines 51-56 of column 2) and comprising a plurality of third network subscriber units or communication terminals and a third network sink node unit configured to wirelessly communicate with the primary third network unit (see Samadi, Fig. 4, Col. 10, Lines 37-41);

and a dedicated connection between a second network sink node unit and a third network unit configured to wirelessly communicate in the third network, whereby a second network subscriber unit or communication terminal is configured to be provided with a communication path to another third network unit (see figures 4A and 4B of Samadi which disclose the third network as well as the dedicated connection between the second network sink node unit).

Regarding claims **42, 60, and 76**, Samadi modified by Muller, teaches the communications system wherein wireless communication in the first network and in the second network is independent of wireless communication in the third network (see lines 51-63 of column 2 and lines 62-63 of column 4).

Art Unit: 2619

Regarding claims **43, 61, and 77**, Samadi modified by Muller, teaches the communications system wherein wireless communication in the first network and in the second network is in a different frequency band from wireless communication in the third network (same reason of rejection of claim 38).

Regarding claims **44, 62, and 78**, Samadi modified by Muller, teaches the communications system wherein the second network comprises a plurality of second network sink node units (Switches) with which the second network subscriber units or communication terminals are configured to wirelessly communicate (see lines 56-58 of column 4 of Samadi).

Regarding claims **45, 63, and 79**, Samadi modified by Muller, teaches the communications system comprising a plurality of a dedicated connections, each dedicated connection being between a respective second network sink node unit and a respective third network unit whereby a second network subscriber unit may be provided with a communication path to another third network unit (Samadi, Fig. 4B, switches (sink nodes) 410-412, devices 321 and 325 (subscribers) communicate to each other through connection 472 and 480, the dedicated connections 480, 481 and 445 between three switches 411, 410 and 412).

Regarding claims **46, 64, and 80**, Samadi modified by Muller, teaches the communications system wherein the said communication path is data communication (Samadi, lines 38-44 of column 1 and lines 56-57 of column 10).

Art Unit: 2619

Regarding claims **47-48, 65-66, and 81-82**, Samadi modified by Muller, teaches the said communication path is packet data communication and uses an internet protocol (Samadi, Col. 4 Lines 64-67, since the network can be ATM or packet switching technologies, it is inherently that using inter-network protocol to transmit packet data between networks).

Regarding claims **49-51, 67-69, and 83-85**, Samadi modified by Muller, the communications system wherein the said communication path in the first, the second and the third network is radio communication (Since all networks are wireless networks (Col. 4, Lines 47-50), it is inherently using radio communication between units within a wireless network).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 2619

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert C. Scheibel whose telephone number is 571-272-3169. The examiner can normally be reached on Mon and Thurs (6:30-5:00) and Fri (6:30-12:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing F. Chan can be reached on 571-272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RCS 10-15-07
Robert C. Scheibel
Patent Examiner
Art Unit 2619

Wing F. Chan
WING CHAN
SUPERVISORY PATENT EXAMINER *10/18/07*